ACCULINK 3165 DSU/CSU

QUICK REFERENCE

Document No. 3165-A2-GL11-30

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Quick Reference

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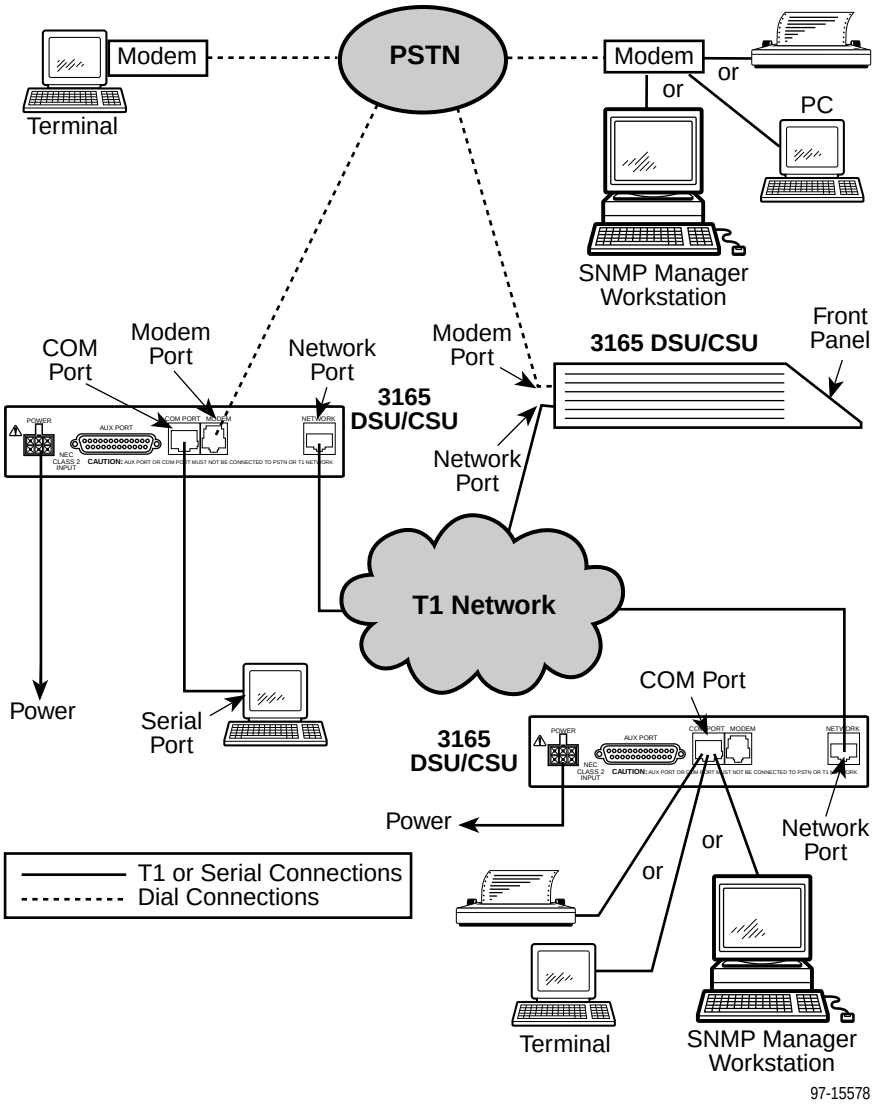
January 1998

Quick Start Procedure

The following procedure is for experienced DSU/CSU users who are familiar with the 3165 DSU/CSU installation process and have no special requirements for their application. See the *ACCULINK 316x Data Service Unit/Channel Service Unit Operator's Guide* (Document No. 3160-A2-GB21) for more information.

1. Attach the power cord to the rear of the DSU/CSU and the other end to a grounded 115 Vac power outlet.
2. Attach the 3165 DSU/CSU network connection to the T1 network using the appropriate cable. Attach the 3165 DSU/CSU to the customer premises equipment via the port connector.
3. Power on the DSU/CSU to perform the power-up self-test.
4. If you intend to use front panel emulation, connect the cable from the PC to the COM port on the rear panel of the DSU/CSU.
5. If you intend to manage the 3165 DSU/CSU with SNMP, cable either the COM or MODEM port (as appropriate for your configuration). Then, configure the SNMP management link.
6. The Factory 1 configuration for ESF framing format and B8ZS line coding format is the default configuration and is appropriate for most networks. If this configuration does not work for you, try the Factory 2 configuration for D4 framing format and AMI line coding format. To further customize configuration options, refer to *Changing Configuration Options* in Chapter 3, *Operation*, and to Appendix C, *Configuration Options*, in the *ACCULINK 316x Data Service Unit/Channel Service Unit Operator's Guide*.
7. During the power-up self-test, the **FAIL** LED flashes, then all LEDs blink twice. When the test is complete, verify that the DSU/CSU is functional by observing that the **OK** and **NETWORK SIG** LEDs are lit.



Cabling Examples

Configuration Options

Configuration options are accessed from the Configuration branch of the front panel menu.

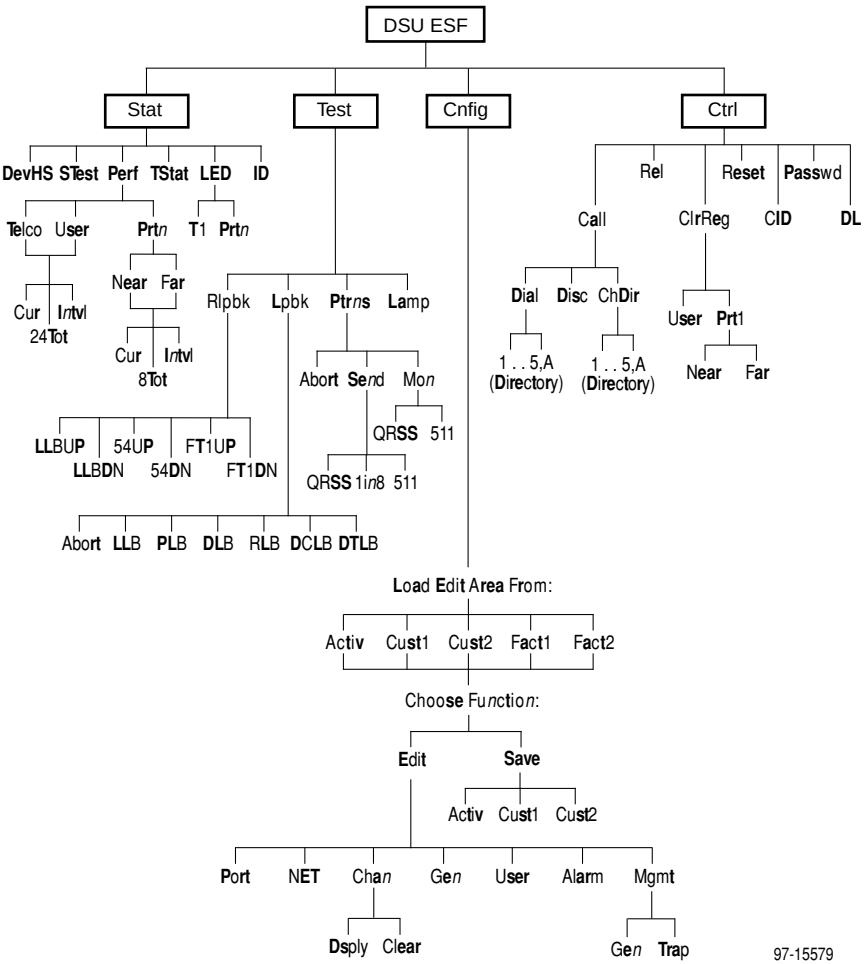


Table 1. Port Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
Port Type:	**E530**	E530	Selects the port type: EIA-530A, V.35, RS449, or X.21.
	V.35	**V.35**	
	RS449	RS449	
	X.21	X.21	
Base Rate:	**Nx64**	**Nx64**	Enables the port to either Nx56 or Nx64 rates.
	Nx56	Nx56	
Net DCLB:	**Disab**	Disab	Network-initiated DCLB, allows DCLB to be controlled by inband V.54 or FT1 (ANSI) codes.
	V.54	V.54	
	FT1	FT1	
	Both	**Both**	
Port LB:	**Disab**	Disab	Port-initiated Loopbacks, allows Loopbacks to be initiated through the port by the external DTE.
	DTLB	DTLB	
	DCLB	DCLB	
	Both	**Both**	
All Ones:	Disab	Disab	All ones sent to network (DTE) T1 when DTR or RTS interrupted.
	DTR	DTR	
	RTS	RTS	
	Both	**Both**	
Rcv Yellow: (Received Yellow)	None	None	Data port remains enabled, or is disabled, on receiving Yellow on network T1.
	Halt	**Halt**	
Tx Clock:	**Int**	**Int**	Selects whether the transmitted data clock is internal (TXC) or external (XTXC).
	Ext	Ext	
InvertTxC: (Invert Tx Clock)	Enab	Enab	Selects phase inversion of the transmit clock (TXC).
	Disab	**Disab**	
InvertData:	Enab	Enab	Allows the data on the port to be inverted.
	Disab	**Disab**	

Table 1. Port Configuration Options (2 of 2)

Option	Factory 1	Factory 2	Comments/Description
Err Rate: (Excessive Error Rate)	**10E–4**	**10E–4**	Selects the error rate threshold for Excessive Error Rate Alarm.
	10E–5	10E–5	
	10E–6	10E–6	
	10E–7	10E–7	
	10E–8	10E–8	
	10E–9	10E–9	

Table 2. Network Interface Configuration Options

Option	Factory 1	Factory 2	Comments/Description
NET Framing:	D4	**D4**	Selects D4 or ESF framing format.
	ESF	ESF	
NET Coding:	AMI	**AMI**	Selects AMI or B8ZS line coding format.
	B8ZS	B8ZS	
LBO:	**0.0**	**0.0**	Provides Line Build Out in dB.
	–7.5	–7.5	
	–15	–15	
	–22.5	–22.5	
ANSI PRM:	Enab	Enab	Sends ANSI Performance Report Messages.
	Disab	**Disab**	
Mgmt Link:	**Disab**	**Disab**	Specifies whether the FDL's Management Link is enabled.
	SNMP	SNMP	
NET LLB:	**Enab**	**Enab**	Network-initiated LLB allows LLB to be controlled by inband LLB codes.
	Disab	Disab	
NET PLB:	**Enab**	**Enab**	Network-initiated PLB allows PLB to be controlled by FDL PLB messages.
	Disab	Disab	
BitStuff:	**62411**	**62411**	Provides enforcement of ones density protection per AT&T TR 62411, ANSI T1-403, and FCC Part 68 Technical Publication.
	Part68	Part68	
	Disab	Disab	
Circuit Ident:	Edit	Edit	Specifies the transmission vendor's circuit identifier.
	Clear	**Clear**	

Table 3. Channel Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
Assign By:	**Block**	**Block**	Determines how channels are assigned: contiguous blocks, ACAMI or individual channels.
	ACAMI	ACAMI	
	Chan	Chan	
Option	**Factory 1**	**Factory 2**	**Comments/Description**
Port Rate:	64 (56) 128 (112) 192 (168) 256 (224) 320 (280) 384 (336) 448 (392) 512 (448) 576 (504) 640 (560) 704 (616) 768 (672) 832 (728) 896 (784) 960 (840) 1024 (896) 1088 (952) 1152 (1008) 1216 (1064) 1280 (1120) 1344 (1176) 1408 (1232) 1472 (1288) 1536 (1344)	64 (56) 128 (112) 192 (168) 256 (224) 320 (280) 384 (336) 448 (392) 512 (448) 576 (504) 640 (560) 704 (616) 768 (672) 832 (728) 896 (784) 960 (840) 1024 (896) 1088 (952) 1152 (1008) 1216 (1064) 1280 (1120) 1344 (1176) 1408 (1232) 1472 (1288) 1536 (1344)	Selects the data rate for the port. The possible rates depend on whether the port is configured for Nx56 or Nx64. This configuration option only appears if the “Assigned By” configuration option is Block or ACAMI.

Table 3. Channel Configuration Options (2 of 2)

	Clear	Clear	Clears (unassigns) channels for this port.
Start At:	N1 (D1) N2 (D2) N3 (D3) N4 (D4) N5 (D5) N6 (D6) N7 (D7) N8 (D8) N9 (D9) N10 (D10) N11 (D11) N12 (D12) N13 (D13) N14 (D14) N15 (D15) N16 (D16) N17 (D17) N18 (D18) N19 (D19) N20 (D20) N21 (D21) N22 (D22) N23 (D23) N24 (D24)	N1 (D1) N2 (D2) N3 (D3) N4 (D4) N5 (D5) N6 (D6) N7 (D7) N8 (D8) N9 (D9) N10 (D10) N11 (D11) N12 (D12) N13 (D13) N14 (D14) N15 (D15) N16 (D16) N17 (D17) N18 (D18) N19 (D19) N20 (D20) N21 (D21) N22 (D22) N23 (D23) N24 (D24)	This configuration option appears if the “Assigned By” configuration option is Block or ACAMI.
Line 1 Displays:	**Line 2 Displays:**	**Meaning**	**Comments/Description**
N1 N2 N3 ..... N24: (If assigned to NET) D1 D2 D3 ..... D24: (If assigned to DTE)	**—**	**Unassigned**	This configuration option appears if the “Assigned By” configuration option is individual channels (Chan). Function key under the channel (N1, N2 etc.) assigns (unassigns) port (1, 2, 3, or 4) to that channel.
	Prt1	Channel assigned to port 1	
	D1, D2 ... D24	Channel assigned to this DTE channel	
	N1, N2 ... N24	Channel assigned to this NET channel	

Table 4. General Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Gen Yellow: (Generate Yellow)	**Enab**	**Enab**	Yellow alarm is generated by the DSU/CSU on LOS, LOF, or AIS.
	Disab	Disab	
Clock Src:	**NET**	**NET**	Selects the clock source to be used as the master clock for the DSU/CSU.
	DTE	DTE	
	Prt1	Prt1	
	Int	Int	
	Ext	Ext	
Clock Rate:	2048	2048	Selects the clock rate of the source if external.
	1544	**1544**	
	8	8	
Tst Timeout	Enab	Enab	Specifies whether the durations of user-initiated tests are limited by Tst Duration.
	Disab	**Disab**	
Tst Duration	**10**	**10**	Specifies the duration of user-initiated loopback and pattern tests.
	Up	Up	
	Down	Down	
	Save	Save	

Table 5. User Configuration Options (1 of 3)

Option	Factory 1	Factory 2	Comments/Description
Self-Test:	**Enab**	**Enab**	Allows bypass of self-test on initialization.
	Disab	Disab	
FP Access:	Enab	Enab	Controls whether front panel access or display is allowed.
	Disab	**Disab**	
FP Pass:	Enab	Enab	Controls whether front panel pass-through is allowed.
	Disab	**Disab**	
Dial-In:	**Enab**	**Enab**	Controls whether dial-in access is allowed.
	Disab	Disab	
Password:	**None**	**None**	Controls whether a password is required during a call setup.
	Com	Com	
	Modem	Modem	
	Both	Both	
Com Use:	Mgmt	Mgmt	Controls how the COM port is used.
	ASCII	**ASCII**	
	Daisy	Daisy	
	Term	Term	
Com Type:	**Async**	**Async**	Controls whether the COM port is synchronous or asynchronous.
	Sync	Sync	
Com Clk:	**Int**	**Int**	Controls whether the COM port uses an internal or external clock.
	Ext	Ext	
Com Rate: (Communication Port Rate)	1.2	1.2	Selects the bit rate for the COM port.
	2.4	2.4	
	4.8	4.8	
	9.6	**9.6**	
	14.4	14.4	
	19.2	19.2	
	38.4	38.4	
Char Length:	7	7	Selects the character length for the COM port.
	8	**8**	
CParity: (Communication Port Parity)	**None**	**None**	Selects the parity for the COM port.
	Even	Even	
	Odd	Odd	

Table 5. User Configuration Options (2 of 3)

Option	Factory 1	Factory 2	Comments/Description
CStop Bits: (Communication Port Stop Bits)	**1**	**1**	Selects the number of stop bits for the COM port.
	1.5	1.5	
	2	2	
Ignore DTR:	Yes	Yes	Specifies whether the COM port ignores DTR.
	No	**No**	
CmInActTm: (COM Port Inactivity Timeout)	Enab	Enab	Specifies whether the communication port disconnects after a certain period of inactivity.
	Disab	**Disab**	
CmDiscTm: (COM Port Disconnect Time)	**5**	**5**	Specifies the period of inactivity (1 to 60 minutes) that causes a disconnect if CmInActTm is enabled.
	Up	Up	
	Down	Down	
	Save	Save	
Modem Use:	Mgmt	Mgmt	Controls whether the MODEM port is used for SNMP management.
	ASCII	**ASCII**	
	Term	Term	
Modem Type:	**Async**	**Async**	Controls whether the MODEM port is synchronous or asynchronous.
	Sync	Sync	
Modem Rate:	1.2	1.2	Selects the bit rate for the MODEM port.
	2.4	**2.4**	
MChar Len: (Modem Port Character Length)	7	7	Selects the character length for the MODEM port.
	8	**8**	
MParity: (Modem Port Parity)	**None**	**None**	Selects the parity for the MODEM port.
	Even	Even	
	Odd	Odd	
MStop Bits: (Modem Port Stop Bits)	**1**	**1**	Selects the number of stop bits for the MODEM port.
	2	2	
LSpaceDsc: (Long Space Disconnect)	Enab	Enab	Selects the long space disconnect configuration option for terminating modem connections.
	Disab	**Disab**	
MoInActTm: (Modem Port Inactivity Timeout)	Enab	Enab	Specifies whether the modem port disconnects after a certain period of inactivity.
	Disab	**Disab**	

Table 5. User Configuration Options (3 of 3)

Option	Factory 1	Factory 2	Comments/Description
MoDiscTm: (Modem Port Disconnect Time)	**5**	**5**	Specifies the period of inactivity (1 to 60 minutes) that causes a disconnect if MInActTm is enabled.
	Up	Up	
	Down	Down	
	Save	Save	
TnSession: (Telnet Session)	Enab	Enab	Specifies whether the DSU/CSU responds to Telnet session requests.
	Disab	**Disab**	
TnPaswd: (Telnet Password)	Enab	Enab	Specifies whether a password is required for Telnet sessions.
	Disab	**Disab**	
TnInActTm: (Telnet Inactivity Timeout)	Enab	Enab	Specifies whether a Telnet session disconnects after a certain period of inactivity.
	Disab	**Disab**	
TnDiscTm: (Telnet Disconnect Time)	**5**	**5**	The period of inactivity (1 to 60 minutes) that causes a disconnect if TnInActTm is enabled.
	Up	Up	
	Down	Down	
	Save	Save	

Table 6. Alarm Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Alrm Msg:	**Disab**	**Disab**	Does not display alarm messages.
	Modem	Modem	Sends alarm messages to Modem port.
	Com	Com	Sends alarm messages to COM port.
	Both	Both	Sends alarm messages to both ports.
SNMP Trap:	Enab	Enab	Sends SNMP traps.
	Disab	**Disab**	
TrapDisc:	**Enab**	**Enab**	Specifies whether the modem connection will disconnect after a trap is sent.
	Disab	Disab	
DialOut:	Enab	Enab	Provides the option to allow automatic dial-out to send alarm messages on MODEM port.
	Disab	**Disab**	
Call Retry:	Enab	Enab	Specifies whether an outgoing call is retried on a busy or failed call attempt.
	Disab	**Disab**	
Dial Delay:	1–4 **5** 6–10	1–4 **5** 6–10	The time (in minutes) to delay between successive alarm dial-outs or retry attempts.
AltDialDir:	**None** 1–5	**None** 1–5	The alternate dial-out directory to use if a call to the primary number cannot be completed.
Err Rate: (Excessive Error Rate)	**10E–4**	**10E–4**	The error rate threshold for Excessive Error Rate Alarm.
	10E–5	10E–5	
	10E–6	10E–6	
	10E–7	10E–7	
	10E–8	10E–8	
	10E–9	10E–9	

Table 7. Management – General Configuration Options (1 of 2)

Option	Factory 1	Factory 2	Comments/Description
SNMP Mgt:	**Disab**	**Disab**	Specifies whether the DSU/CSU responds to SNMP session requests.
	Enab	Enab	
NMS Valid:	**Disab**	**Disab**	Specifies whether the DSU/CSU validates the IP address of an SNMP manager attempting access.
	Enab	Enab	
Num Sec Mgrs:	**1** 2–10	**1** 2–10	The number of management systems authorized to send SNMP messages to this unit.
NMS *n* IP Adr:	Edit	Edit	Specifies the IP address for each NMS. This configuration option is repeated for all *n* NMSs.
	Clear	**Clear**	
NMS *n* ACS:	**Read**	**Read**	The type of access allowed for NMS *n*.
	R/W	R/W	
System Name:	Edit	Edit	The SNMP system name for this device.
	Clear	**Clear**	
System Location:	Edit	Edit	The SNMP system location for this device.
	Clear	**Clear**	
System Contact:	Edit	Edit	The SNMP system contact name for this device.
	Clear	**Clear**	
CommunityName1:	Edit	Edit	A community name that is allowed access to this device. Defaults to *public*.
	Clear	**Clear**	
Access 1:	**Read**	**Read**	The type of access allowed for community name 1.
	R/W	R/W	
CommunityName2:	Edit	Edit	A community name that is allowed access to this device.
	Clear	**Clear**	
Access 2:	**Read**	**Read**	The type of access allowed for community name 2.
	R/W	R/W	
IP Adr:	Edit	Edit	The IP address needed to access the device.
	Clear	**Clear**	
NetMask:	Edit	Edit	The Subnet Mask needed to access the device.
	Clear	**Clear**	
Com IP Adr:	Edit	Edit	The IP address for the COM port when configured for SNMP.
	Clear	**Clear**	

Table 7. Management – General Configuration Options (2 of 2)

Option	Factory 1	Factory 2	Comments/Description
Com NetMask:	Edit	Edit	The Subnet Mask needed to access the device when the COM port is configured for SNMP.
	Clear	**Clear**	
Com Link:	**PPP**	**PPP**	The link layer protocol for the COM port when configured for SNMP.
	SLIP	SLIP	
Modem IP Adr:	Edit	Edit	Specifies the IP address for the MODEM port when configured for SNMP.
	Clear	**Clear**	
Mdm NetMask:	Edit	Edit	Specifies the Subnet Mask needed to access the device when the MODEM port is configured for SNMP.
	Clear	**Clear**	
Alt Mdm IP Adr:	Edit	Edit	Specifies the alternate IP address for the MODEM port when configured for SNMP.
	Clear	**Clear**	
Alt Mdm NetMask:	Edit	Edit	Specifies the alternate modem Subnet Mask needed to access the device when the MODEM port is configured for SNMP.
	Clear	**Clear**	
Modem Link:	**PPP**	**PPP**	Specifies the link layer protocol for the MODEM port when configured for SNMP.
	SLIP	SLIP	
Def Netwk:	**None**	**None**	Specifies the default network destination.
	Com	Com	
	Modem	Modem	
	FDL	FDL	

Table 8. Management – Trap Configuration Options

Option	Factory 1	Factory 2	Comments/Description
Num Trap Mgrs:	**1** 2–6	**1** 2–6	The number of trap managers supported by the device.
Trap*n* IP Adr:	Edit	Edit	Specifies the IP address for each trap manager. This configuration option is repeated for all *n* managers.
	Clear	**Clear**	
Trap*n* Dst:	**None**	**None**	Specifies the network destination for Trap Manager *n*.
	Def	Def	
	Com	Com	
	Modem	Modem	
	FDL	FDL	
Gen Trap:	Disab	Disab	Specifies the general trap types to enable: WarmStart, Authentication Failure or both.
	Warm	Warm	
	Auth	Auth	
	Both	**Both**	
Entp Trap:	**Enab**	**Enab**	Specifies whether the EnterpriseSpecific trap type is enabled.
	Disab	Disab	
Link Trap:	Disab	Disab	Specifies the link trap type to enable: Trap on Link Up, Link Down, or both.
	Up	Up	
	Down	Down	
	Both	**Both**	
Trap I/F:	NET	NET	When any link trap types are enabled, specifies which links to send traps for.
	T1s	T1s	
	Ports	Ports	
	All	**All**	

Notes